

## **VARIABLE SUPPLY AMPLIFIER SYSTEM**

### **ABSTRACT**

Systems and methods are provided for determining and providing an appropriate variable voltage supply to a power amplifier. A power amplifier is operative to amplify an input signal. A digital buffer stores a copy of the input signal representing a predetermined interval of time. An envelope profiler analyzes the buffered interval of the input signal and determines an appropriate supply signal profile for the power amplifier over the predetermined time interval. A supply control provides a supply signal according to the determined profile.